Bleuler rejects vitalism, yet sets out with a long and effective diatribe against mechanistic biology; he insists strongly on the purposive nature of both the internal activities and the outward behaviour of animals. The former he ascribes to a *psychoide* and the latter to a *psyche* without professing to be able to draw any sharp line between them. Both are organizations, complex systems of which engrams are the essence. For him psychical activities have causal efficacy in behaviour. The engram is not molecular, but is borne by the genes. Any molecular theory of it he regards as utterly impossible. He claims that his doctrine is monistic, a form of identity-doctrine.

All three authors insist that the theory of the engram gives us the possibility of explaining, not only all the mental activities, but also all the facts of heredity and development, ontogenetic and phylogenetic. For, in the view of all three, the development of the individual is a manifestation of racial memory, as also is all instinctive

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chemical laws alone afford a sufficient explanation ? * Rignano asks this rhetorical question, implying clearly that in his view the answer must be No. And his readers might justly infer that Rignano is decidedly anti-mechanist and even decidedly a vitalist. But he goes on forthwith to say : [e] Is it not more in accord with sound positive method to enquire whether by assuming a new form of energy—always obedient to the laws of energetics, but endowed with well-defined elementary properties different from those of any form of energy in the inorganic world—it may not be possible to explain these characteristic properties of life.' And in the same book *(The Nature of Life,* 1930), his latest and most mature work, he writes of 'The appearance of life as an energetic synthesizing process *sui*

generis which reconstructs the living subject by the very fact of drawing it into its orbit'. I cite these passages to illustrate the extreme difficulty of classifying the views of this (as of many other authors) under any one head. On earlier pages (p. 100 *seqq.)* I have briefly exposed the illegitimacy of any such assumption of special energies.